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2/1/08

Kresta L. DeZwaan

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Art Unit : 3661

Examiner : Michael J. Zanelli Applicant : Joseph S. Stam et al.

Appln. No. : 10/783,131

Filing Date : February 20, 2004

Confirmation No. : 7106

Docket No. : AUTO 2\1US1

Customer No. : 028,167

For : MONITORING AND AUTOMATIC

**EQUIPMENT CONTROL SYSTEMS** 

Mail Stop Appeal Brief – Patents (Reply Brief) Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

# TRANSMITTAL OF REPLY BRIEF IN RESPONSE TO EXAMINERS ANSWER (PATENT APPLICATION – 37 CFR §1.193(b)(1))

1. Transmitted herewith is the REPLY BRIEF in this application, with respect to the Notice of Appeal filed on January 3, 2007.

#### 2. STATUS OF APPLICANT

This	application is on behalf of:
<u>X</u>	other than a small entity small entity
	A Verified Statement:
	is attached was already filed

	ant : Joseph S. Stam et al.  No. : 10/783,131 : 2
3.	FEE FOR FILING REPLY BRIEF
	There is no fee for filing a reply brief.
	Reply Brief Fee Due: \$0.00
4.	EXTENSION OF TERM
C.F.R.	The proceedings herein are for a patent application and the provisions of 37 §1.136 apply.
	X Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.
5.	TOTAL FEE DUE
	The total fee due is:
	Reply Brief fee: $\frac{$0.00}{$0.00}$ Extension fee (if any): $\frac{$0.00}{}$
	TOTAL FEE DUE: \$00.00
5.	FEE PAYMENT
	Attached is a check in the sum of
	Charge Account No. 07-1070 the sum of A duplicate of this transmittal is attached.
6.	FEE DEFICIENCY
1070.	X If any additional extension and/or fee is required charge Account No. 07-A duplicate of this transmittal is attached.

Applicant

Joseph S. Stam et al.

Appln. No.

10/783,131

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Respectfully Submitted,

JOSEPH S. STAM ET AL.

Date: TUBRUARY 1, 2008

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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Art Unit

3661

Examiner

Michael J. Zanelli

Applicant

Joseph S. Stam et al.

Appln. No.

10/783,131

Filing Date

February 20, 2004

Confirmation No.

7106

For

MONITORING AND AUTOMATIC EQUIPMENT CONTROL

**SYSTEMS** 

Mail Stop Appeal Brief – Patents (Reply Brief) Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

#### REPLY BRIEF IN RESPONSE TO EXAMINER'S ANSWER (37 CFR §1.193(b)(1))

The Appellant respectfully requests that the Board of Patent Appeals and Interferences consider the reply brief to the Examiner's answer regarding the above referenced case included herewith. This reply brief to the Examiner's answer is in furtherance of the Notice of Appeal filed in the above referenced case on January 3, 2007.

If any fee is required, the Appellant asks that the fee be charged to Deposit Account No. 07-1070.

#### **REMARKS**

The Examiner has maintained his rejection of claims 1-59, 63 and 68 in a variety of forms under 35 U.S.C. §§102(b), 102(e), 103(a) and 112 in the Examiner's Answer, dated December 12, 2007. In addition to the arguments in support of patentability asserted in the Appellant's Appeal Brief, dated October 12, 2007, the Appellant requests that the Board of Patent Appeals and Interferences consider the following.

In review of the Examiner's answer, it appears that the confusion lies in the fact that each of the independent claims, as once again listed below, comprises <a href="physical structure">physical structure</a> (for example, an image sensor and control) that in and of itself would be found in a plurality of devices predating the present application. The novelty of the present invention lies in the specific configurations recited within each claim (whether independent or dependent). The Examiner is not acknowledging the fact that each section of the present specification appended to the end of each independent claim below describes a "control system". It is common knowledge to those skilled in the art that a "control system" incorporates various combinations of <a href="physical structure">physical structure</a> along with hard wired interconnections, firmware, software, sub-combinations thereof and combinations thereof. The Appellant respectfully submits that a careful review of the pending claim language in combination with the portions of the specification appended below reveals the fact that the Examiner is disregarding this fundamental principal and is focused only on the <a href="physical structure">physical structure</a> in both the pending application and the prior art relied upon in the individual rejections.

### 1. Independent Claim 1

Independent claim 1 defines an automatic vehicle equipment control system, comprising: (a) at least one imager comprising (a1) at least one image sensor and (a2) at least one other component selected from the group comprising: (a2i) at least one temperature sensor, (a2ii) at least one control output and (a2iii) at least one low voltage differential signal transceiver; (b) at least one enhanced transceiver; and (c) at least one interconnection between said at least one imager and said at least one enhanced transceiver, wherein (d) at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image.

The discussion contained in paragraph [0036] describes various "vehicle equipment" to which claim 1 is directed (preamble and element d). Paragraphs [0047] and [0048] provide a concise list of elements that may be included in a given imager including those elements recited in claim 1 (elements a2i – a2iii). Paragraphs [0049] - [0127] along with Tables 1-15 and Figs. 7a, 8a and 9a-9f provide additional support for the subject matter of claim 1.

## 2. Independent Claim 14

Independent claim 14 defines an automatic vehicle equipment control system, comprising: (a) an imager comprising (a1) an image sensor and (a2) at least one other component selected from the group comprising: (a2i) at least one control output and (a2ii) at least one low voltage differential signal transceiver, wherein (b) at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image.

The discussion contained in paragraph [0036] describes various "vehicle equipment" to which claim 14 is directed. Paragraphs [0047] and [0048] provide a concise list of elements that may be included in a given imager including those elements recited in claim 14 (elements a2i and a2ii). Paragraphs [0049] - [0127] along with Tables 1-11 and Fig. 7a provide additional support for the subject matter of claim 14.

#### 3. Independent Claim 28

Independent claim 28 defines an imager, comprising: (a) an image sensor and (b) at least one other component selected from the group comprising: (b1) at least one control output and (b2) at least one low voltage differential signal transceiver, (c) wherein said image sensor and said at least one other component are formed on a common silicon wafer, wherein (d) at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image.

Paragraphs [0047] and [0048] provide a concise list of elements that may be included in a given imager including those elements recited in claim 28 (elements b1 and b2). The last sentence of paragraph [00127] supports forming these components on a common silicon wafer. The discussion contained in paragraph [0036] describes various "vehicle equipment" to which claim 28 is directed. Paragraphs [0049] - [0127] along with Tables 1-11 and Fig. 7a provide additional support for the subject matter of claim 28.

### 4. Independent Claim 36

Independent claim 36 defines an enhanced transceiver, comprising: (a) at least one low voltage differential signal transceiver and (b) at least one memory formed on a common silicon wafer configured to communicate with an imager, wherein (c) at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image.

Paragraph [0165] provides a concise list of elements that may be included in a given enhanced transceiver including those elements recited in claim 36 (elements a and b). The discussion contained in paragraph [0036] describes various "vehicle equipment" to which claim 36 is directed (element c). Paragraphs [0110]-[0127] along with Tables 12-15 and Figs. 8a and 9a-9f provide additional support for the subject matter recited in claim 36.

## 5. Independent Claim 40

Independent claim 40 defines an imager board interconnection, comprising: (a) at least one low voltage differential signal transceiver defining at least a portion of the

imager board interconnection, wherein (b) the imager board interconnection is configured to operate up to at least one megabaud without emitting unacceptable electromagnetic interference.

The discussion contained in paragraph [0256] along with Figs. 9a-9f provides the most concise support for the subject matter recited in claim 40.

#### 6. Independent Claim 42

Independent claim 42 defines an automatic vehicle equipment control system, comprising: (a) an enhanced transceiver comprising (a1) at least one low voltage differential signal transceiver and (a2) at least one memory configured to communicate with an imager, wherein (c) at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image.

Paragraph [0165] provides a concise list of elements that may be included in a given enhanced transceiver including those elements recited in claim 42 (elements a1 and a2). The discussion contained in paragraph [0036] describes various "vehicle equipment" to which claim 42 is directed (element c). Paragraphs [0110]-[0127] along with Tables 12-15 and Figs. 8a and 9a-9f provide additional support for the subject matter recited in claim 42.

#### 7. Independent Claim 58

Independent claim 58 defines a vision system, comprising: (a) at least one imager comprising (a1) at least one image sensor and (a2) at least one low voltage differential signal transceiver formed on a common silicon wafer; (b) at least one processor; and (c) at least one enhanced transceiver interconnected between said (a) at least one imager and said (b) at least one processor, said at least one enhanced transceiver comprising (c1) at least one dual port memory.

Paragraph [0165] provides a concise list of elements that may be included in a given enhanced transceiver including those elements recited in claim 58 (elements c and c1). Paragraphs [0110]-[0127] along with Tables 12-15 and Figs. 8a and 9a-9f provide additional support for the subject matter recited in claim 58.

Accordingly, reversal of the rejections of these claims under 35 U.S.C. §§102(b), 102(e), 103(a) and 112 and 103 is appropriate and is respectfully solicited. The Appellant, therefore, respectfully requests that the Board of Patent Appeals and Interferences issue a decision in which claims 1-59, 63 and 68 are indicated to be allowable in light of the art of record. The Appellant additionally requests that the decision indicate support for passing this case to allowance.

Respectfully submitted, JOSEPH S. STAM ET AL. By: Gentex Corporation

PORVARY 1, 2008

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